

SDS (Safety Data Sheet)

Doc No.: SDS2019-E-BS850-VER2 Date issued: February 28, 2023

Date reviewed: March 29, 2023

1. Identification

Product name:	Rosin based paste BS-850				
Manufacturer:	TAIYO ELECTRIC IND. CO., LTD.	Section:	Engineering department		
Address:	2-16-8 Yamate Fukuyama Hiroshima 720-0092 JAPAN				
TEL:	084-951-1512	FAX:	084-951-9531	E-mail:	info@goot.co.jp
Recommended use:	For electronic components				

2. Hazard Identification

GHS Classification

Physical Hazards

Flammable liquid: Category 4

Health Hazards

Acute toxicity (Oral): Category 4

Serious eye damage/eye irritation: Category 2

Specific target organ toxicity (Single exposure): Category 3 (respiratory tract irritation, narcotic effect)

Hazards not described above are "Not applicable" or "Classification not possible".

Label elements

Symbol



Signal Word

Warning

Hazard statement

Harmful if swallowed. (H302)

Combustible liquid (H227)

Causes serious eye irritation. (H319)

May cause respiratory irritation. (H335)

May cause drowsiness or dizziness. (H336)

Precautionary statement

Prevention

Do not eat, drink or smoke when using this product. (P270)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Wash hands thoroughly after handling. (P264)

Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)

Use only outdoors or in a well-ventilated area. (P271)

Response

IF SWALLOWED: Call a doctor if you feel unwell. (P301+P312)

Rinse mouth. (P330)

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IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
If eye irritation persists:	Get medical advice/attention. (P337+P313)
IF INHALED:	Remove person to fresh air and keep comfortable for breathing. (P304+P340)
Call a doctor if you feel unwell. (P312)	
Storage	
Store in a well-ventilated place. Keep container tightly closed. (P403+P233)	
Store locked up. (P405)	
Disposal	
Dispose of contents/container in accordance with local/regional/national/international regulation. (P501)	

(H, P and numbers) ... JIS Z 7253 code

3. Composition/Information on Ingredients

Substance or mixture:	Mixture				
Chemical name or common name:	Paste				
Component	Concentration or concentration ranges (weight percentage)	Chemical/ Structural Formula	Class Reference Number in the Gazette List		CAS No.
			CSCCL No.	ISHL No.	
Rosin	40 – 50%	Confidential	Confidential	Confidential	Confidential
2-Methyl-2,4-pentanediol	40 – 50%	C ₈ H ₁₄ O ₂	2-240	–	107-41-5
Thixotropic agent	1 – 10%	Confidential	Confidential	Confidential	Confidential
Organic acid	Less than 1%	Confidential	Confidential	Confidential	Confidential
Activator	0.1 – 3%	Confidential	Confidential	Confidential	Confidential

CSCCL...Chemical Substances Control Law

ISHL...Industrial Safety and Health Law

4. First-aid Measures

IF INHALED:	Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. Call a doctor if you feel unwell.
IF ON SKIN:	Wash skin with plenty of water and soap. If appearance changes, or pain persists, get medical advice/attention.
IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not force eyes open if too uncomfortable. Immediately call a doctor. If eye irritation persists: Get medical advice/attention.
IF SWALLOWED:	Rinse mouth. Do NOT induce vomiting. Immediately call a doctor.

5. Fire-fighting Measures

Extinguishing media:	Dry chemical, foam extinguisher, carbon dioxide, sand
Unsuitable extinguishing media:	Water spray may be used to cool down, but a straight stream of water should not be used to extinguish.
Specific hazards arising from the chemical:	Black smoke, carbon monoxide, and other toxic gases are generated by pyrolysis and incomplete combustion: there is a possibility of danger of inhalation.

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Specific firefighting measures:	Sprinkle water on surrounding facility to cool it down. Fight fire from upwind if possible.
Special protective equipment and precautions for fire-fighters:	Wear appropriate protective equipment (gloves, glasses, mask, supplied-air respirator).

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:	Do not touch leak or walk onto leak. If indoors, ventilate well until disposal is completed. Avoid contact with skin. Wear protective gloves (made of rubber or resin), protective glasses (made of glass or resin goggle type), and boots (made of rubber).
Environmental precautions:	Avoid release to sewer, public water area.
Methods and materials for containment and cleaning up:	Wipe off most of the content with waste cloth etc., then wipe off the residual with alcohol. Sweep up the residue, and collect in a suitable container.
Prevention of secondary hazards:	Use non-sparking tools.

7. Handling and Storage

Handling	
Appropriate engineering controls:	Use in a well-ventilated area. Wear appropriate personal protective equipment such as protective glasses, protective gloves etc.
Precautions for safe handling:	Use local exhaust ventilation when used indoors. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
Incompatible materials:	Refer to "10. Stability and Reactivity".
Hygiene measures:	Wash hands thoroughly after handling. Before eating, drinking and/or smoking, gargle well.
Storage	
Conditions for safe storage:	Keep away from heat, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Do not expose to temperature exceeding 30°C. Store locked up.
Safe containers and packaging materials:	No information available.

8. Exposure Controls/Personal Protection

Administrative level:	Not set
Occupational Exposure Limit:	Japan Society for Occupational Health, Not set ACGIH (TLV-TWA) 2-Methyl-2,4-pentanediol 25 ppm (TLV-STEL) 2-Methyl-2,4-pentanediol 50 ppm, 10mg/m ³
Facility measures:	Use closed type equipment or local exhaust ventilation. Install equipment nearby for washing hands and eyes.

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Personal protective equipment	
Respiratory protection:	Wear protective mask if needed.
Hand protection:	Wear protective gloves if needed.
Eye/face protection:	Wear eye protection if needed.
Skin and body protection:	Wear protective clothing and safety shoes if needed.
Special precautions:	Keep workplace tidy and orderly, and keep product away from fire.

9. Physical and Chemical Properties

Physical state	
Physical state, color:	Highly viscous liquid, brown
Odor:	Mild ether odor
Melting point/freezing point:	Melting point (2-Methyl-2,4-pentanediol) -50°C
Boiling point or initial boiling point and boiling range:	Boiling point (2-Methyl-2,4-pentanediol) 198°C
Flammability:	Flammable
Lower and upper explosion limit/flammability limit:	2-Methyl-2,4-pentanediol 1.3vol% - 9.0vol%
Flash point:	Product: >90°C 2-Methyl-2,4-pentanediol 90°C
Auto-ignition temperature:	2-Methyl-2,4-pentanediol 425°C
Decomposition temperature:	No data available
pH:	No data available
Kinematic viscosity:	No data available
Solubility:	Product: Insoluble in water. Soluble in many kinds of organic solvent.
Partition coefficient: n-octanol/water (log value):	2-Methyl-2,4-pentanediol 0.58
Vapor pressure:	2-Methyl-2,4-pentanediol 0.07hPa (20°C)
Density and/or relative density:	Product: approx. 1 (specific gravity) 2-Methyl-2,4-pentanediol 0.924 (specific gravity)
Relative vapor density:	No data available
Particle characteristics:	No data available

10. Stability and Reactivity

Reactivity:	Nothing in particular
Chemical stability:	Stable under storage conditions described in "Storage."
Possibility of hazardous reactions:	As product contains organic substances, contact with oxidizing substance may cause ignition/explosion.
Conditions to avoid:	Avoid contact with sunlight, flame, hot surfaces, and incompatible materials.
Incompatible materials:	Strong oxidizers, strong alkali
Hazardous decomposition products:	Nothing in particular

11. Toxicological Information

Acute toxicity (oral):	Category 4 based on the equation for mixture. (Activator: Category 4)
Acute toxicity (dermal):	Classification not possible
Acute toxicity (Inhalation: gas):	Not classified

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Acute toxicity (Inhalation: vapor):	Classification not possible
Acute toxicity (Inhalation: dust/mist):	Classification not possible
Skin corrosion/irritation:	Classification not possible
Serious eye damage/eye irritation:	Category 2 (as the total concentration for Category 2A and 2B is 10% or more) (2-Methyl-2,4-pentanediol, Activator)
Respiratory sensitization:	Classification not possible
Skin sensitization:	Classification not possible
Germ cell mutagenicity:	Classification not possible
Carcinogenicity:	Classification not possible
Reproductive toxicity:	Classification not possible
Specific target organ toxicity (single exposure):	Category 3 (narcotic effect, respiratory tract irritation) (as the total concentration for Category 3 (narcotic effect, respiratory tract irritation) is 20% or more) (2-Methyl-2,4-pentanediol)
Specific target organ toxicity (repeated exposure):	Classification not possible
Aspiration hazard:	Classification not possible

12. Ecological Information

Ecotoxicity:	
Acute aquatic toxicity:	Classification not possible
Chronic aquatic toxicity:	Classification not possible
Persistence and degradability, and bioaccumulation potential:	No data available
Mobility in soil:	No data available
Hazardous to the ozone layer:	Ingredients in Montreal Protocol are not included. Classification not possible.
Other adverse effects:	Because of unknown hazards do not discard in general environment.

13. Disposal Considerations

Waste residues:	Commit disposal to industrial waste disposal contractor approved by government.
Contaminated packaging:	Remove contents completely, and commit disposal of container to industrial waste disposal contractor approved by government.

14. Transport Information

International regulations	
UN Number:	Not applicable
UN Proper Shipping Name:	Not applicable
Transport hazard class:	Not applicable
Packing Group:	Not applicable
Marine pollutant:	Not applicable
Local regulations	
Land transport regulations:	Follow Fire Service Act, Road Act etc. (Japan).
Marine transport regulations:	Follow Ship Safety Act (Japan).
Air transport regulations:	Follow Civil Aeronautics Act (Japan).
Special precautions and conditions for transport:	Cover product with sheet to prevent contamination by foreign objects, water, and direct sunlight. No fire.

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Conduct packaging, indication, and transportation in accordance with applicable laws and regulations.

Load so that there will be no tumbling, dropping, or damaging. Take secure preventative precautions for load shifting.

Prior to transport, verify that there is no damage, corrosion or leakage of the container.

15. Regulatory Information

Industrial Safety and Health Act (Japan):	Dangerous Articles and Harmful Substances Whose Names, etc. Should Be Notified (2-Methyl-2,4-pentanediol) (Order for Enforcement Article 18, 18-2, Appended Table 9).
Poisonous and Deleterious Substances Control Act (Japan):	Not applicable
PRTR (Japan):	Not applicable (even after April 1st, 2023)
Fire Service Act (Japan):	Category IV, Class III petroleum (insoluble in water) Danger grade 3, Specified Quantity 2000L (Article 2-7, Appended Table 1, Regulations Concerning the Control of Hazardous Materials Article 39-2, Cabinet Order Concerning the Control of Hazardous Materials Attached table 3)
Ship Safety Act (Japan):	Not applicable
Civil Aeronautics Act (Japan):	Not applicable

16. Other Information

Referred documents: SDS issued by supplier(s)
 GHS Classification Results by National Institute of Technology and Evaluation (NITE)
 JIS Z7252:2019
 JIS Z7253:2019

For handling the information in this SDS:

This Safety Data Sheet is issued in accordance with JIS Z 7253: 2019.

This SDS is based on information currently available for general handling, and may be revised based on new findings.

We have no responsibility for the information given here in good faith.

Evaluation for danger/toxicity is not necessarily complete. Please take safety precautions at your responsibility.